

A man travelled $\frac{3}{5}$ of his journey by rail, $\frac{1}{4}$ by a taxi, $\frac{1}{8}$ by a bus and the remaining 2 km on foot. What is the length of his total journey?

ANSWER:

Let the length of the total journey be x km.

According to the question, we have:

$$\frac{3}{5}x + \frac{1}{4}x + \frac{1}{8}x + 2 = x$$

$$\Rightarrow \frac{24x+10x+5x+80}{40} = x$$

$$\Rightarrow 39x + 80 = 40x$$

$$\Rightarrow x = 80$$

\therefore The length of his total journey is 80 km.